Extending Virtual Machine Deletion with Scripts

View Manager 4.x

When you delete a virtual machine from the VMware® View™ environment, you might want to run your own scripts to remove Active Directory or database entries that reference the deleted machine. This technical note describes how to configure View Manager to run such deletion scripts automatically when you delete a virtual machine.

To enable a deletion script, you add an entry for the script to the Windows Registry, configure the account of the user who has the appropriate privileges to run the script, and enable the VMware View Script Host service.

You must configure all View Connection Server hosts that need to run deletion scripts. There is no mechanism to propagate registry changes, VMware View Script Host service configuration changes, and deletion scripts between View Connection Server hosts.

Environment Variables

Deletion scripts cannot run interactively. A deletion script runs in an environment created by View Manager, and the script must obtain its input data from this environment. Table 1 shows the environment variables that you can use. You should ensure that a deletion script validates the existence of any environment variable that it uses.

<table>
<thead>
<tr>
<th>Environment Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDM_DeleteVm_VmName</td>
<td>Name of the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_VmDnsName</td>
<td>DNS name of the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_VmDn</td>
<td>Distinguished name of the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_VmPath</td>
<td>Path in the VMware vCenter™ server that manages the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_PoolDn</td>
<td>Distinguished name of the pool that contains the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_VcDn</td>
<td>Distinguished name of the vCenter server that manages the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_VmMac.&lt;N&gt;</td>
<td>MAC address for the network interface number of the virtual machine being deleted.</td>
</tr>
<tr>
<td>VDM_DeleteVm_Error</td>
<td>String that describes a problem that occurred while deleting the virtual machine.</td>
</tr>
</tbody>
</table>

The following Visual Basic code fragment shows how to access the environment variable for the MAC address of the first network interface of a virtual machine that is being deleted.

```vbnet
Dim shell
set shell = WScript.CreateObject( "WScript.Shell" )

macAddr0 = shell.ExpandEnvironmentStrings("%VDM_DeleteVm_VmMac.0%")
```
The next example shows how you could extract the name of the virtual machine, and use this value to delete the corresponding entry from Active Directory.

```vbscript
Dim shell
set shell = WScript.CreateObject( "WScript.Shell" )
set vmName = shell.ExpandEnvironmentStrings("%VDM_DeleteVm_VmName%")
set machineObj = GetObject("LDAP://CN=" & vmName & ",CN=Desktops,DC=MYDOMAIN,DC=COM")
machineObj.DeleteObject(0)
```

This example assumes that the script runs with the administrative rights to update entries in Active Directory. You must modify the script to correspond to the configuration of your local systems in Active Directory.

### Add a Windows Registry Entry for a Deletion Script

To make a deletion script available for execution, you must add it to the Windows registry. You must create an entry on each View Connection Server instance where you want View Manager to run the deletion script when you delete a virtual machine.

**To add an entry for a deletion script in the registry on a View Connection Server instance**

1. Start the Windows Registry Editor by entering regedit at the command prompt.
2. In the registry, navigate to `HKLM\SOFTWARE\VMware, Inc.\VMware VDM\ScriptEvents`.
3. In the navigation area, right-click `ScriptEvents`, select `New > Key`, and create a key named `DeleteVm`.
4. In the navigation area, right-click `DeleteVm`, select `New > String Value`, and create a string value that identifies the deletion script to be run.
   - To run more than one deletion script, create a string value entry for each script under the `DeleteVm` key. You cannot specify the order in which these scripts run. If the scripts must run in a specified order, invoke them from a single control script.
5. In the topic area, right-click on the entry for the new string value, and select `Modify`.
6. In `Value data`, enter the command line that invokes the deletion script, and click `OK`.
   - Specify the full path of the deletion script and any files that it requires.
7. If you want the VMware View Script Host service to time out the deletion script, right click on the `Default` key, select `Modify`, enter the timeout value in milliseconds, and click `OK`.
8. Exit the Registry Editor, and restart the system.

### Configure the VMware View Script Host Service

You must configure the VMware View Script Host service on each View Connection Server instance where you want View Manager to run the deletion script. By default, the VMware View Script Host service is disabled.

---

**CAUTION** Running a deletion script under the local system account could compromise the security of the View Connection Server host. If you configure an account other than the local system account to run a deletion script, verify that the account has read permission on the registry key for the script. You should also limit the administrative rights of a deletion script to those rights that allow it to perform its function.

**To configure the VMware View Script Host service**

1. Start the Windows Services tool by entering `services.msc` at the command prompt.
2. In the details pane, right-click on the VMware View Script Host service entry, and select `Properties`.
4. If you do not want the local system account to run the deletion script, select `This account`, and enter the details of the account to run the deletion script.
5. Click `OK`, and exit the Services tool.